



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,725	12/04/2003	John Paul Weirich		4004

7590 09/08/2005
JOHN WEIRICH
524 KENDALL #3
PALO ALTO, CA 94306

EXAMINER

KASZTEJNA, MATTHEW JOHN

ART UNIT PAPER NUMBER

3739

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No. 10/729,725	Applicant(s) WEIRICH, JOHN PAUL	
	Examiner Matthew J. Kasztejna	Art Unit 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/25/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 3-20 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only and cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have been treated on the merits as best understood by the examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-13 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 11-13 recites the limitations "electromagnetic wave emitter" and electromagnetic wave receiver in the stated claims. There is insufficient antecedent basis for this limitation in the claim.

Claims 16-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what is being claimed in the stated claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,402,686 to Ouchi in view of U.S. Patent No. 5,668,555 to Starr.

In regards to claims 1-2, Ouchi discloses an imaging system comprising: a swallowable capsule comprising: an observing system for imaging objects; and controlling circuitry means 14d that operatively regulates the imaging system; and a transceiver 14b to transmit imaging signals of the observation system and to receive controlling signals; and a power supply 14c for the imaging system (see Col. 4, Lines 8-61) but is silent with respect to the observing system comprising an ultra-wideband sensor system. Starr teaches of an analogous system used to provide imaging in the biologic sciences. The three dimensional imaging system utilizes a ultra-wideband radar circuit, a focused radar antennae, an erasable programmable read only memory means, a memory for storing translated signal and a CAD program means for processing translated signals into tree dimensional images (see Col. 2, Lines 33-53). It would have been obvious to one skilled in the art at the time the invention was made to use an ultra-wideband sensor system as the observing system in the apparatus of Ouchi in order to provide three dimensional images in real-time as taught by Starr (see Col. 1, Lines 26-39).

In regards to claims 3-6, Ouchi discloses an imaging system including a reception system 11, operatively connected to the imaging system, which receives the transmitted imaging signals comprising: a plurality of antennae; and a power supply; and storage means; and controlling circuitry means operatively connecting the parts of the reception system (see Col. 6, Lines 41-67).

In regards to claims 7-20, Starr teaches of a system including a programmable computer system operatively connected to the reception system and the imaging system, which processes the transmitted imaging signals saved in the storage means and controls the imaging system comprising: a computer system; and software programs which process the imaging signal data into various presentation formats; and software programs to issue instructions to the controlling circuitry means of the imaging system; and input means; and transmission means operatively connecting the computer system input means with the storage means of the reception system (see Col. 3, Lines 5-60 and Fig. 3). It would have been obvious to one skilled in the art at the time the invention was made to include a programmable computer system in the apparatus of Ouchi having computer aided design software to provide fine image resolution as taught by Starr. Furthermore, it is well-known in the art to use either UV or infrared LEDs in ultra-wideband radar sensor systems.

Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S Patent No. 5,668,555 to Starr in view of U.S Patent No. 6,402,686 to Ouchi in view of U.S Patent No. 6,428,469 to Iddan et al.

In regards to claims 1-2, Starr discloses an imaging system comprising: an observing system for imaging objects; and controlling circuitry means that operatively regulates the imaging system; and a transceiver to transmit imaging signals of the observation system and to receive controlling signals; and a power supply for the imaging system (see Col. 3, Lines 5-60 and Fig. 3) but is silent with respect to the system being provide within a swallowable capsule. Iddan et al. teaches of an analogous imaging system provided in an in-vivo autonomous video capsule (see Col. 1, Lines 30-57). It would have been obvious to one skilled in the art at the time the invention was made to provide the imaging system of Starr in a swallowable capsule to allow one to provide images throughout the entire gastro-intestinal tract as taught by Iddan et al. and is well known in the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Kasztejna whose telephone number is (571) 272-6086. The examiner can normally be reached on Mon-Fri, 8:30-6:00.

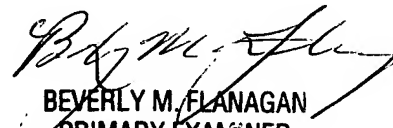
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3739

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJK

9/6/05


BEVERLY M. FLANAGAN
PRIMARY EXAMINER